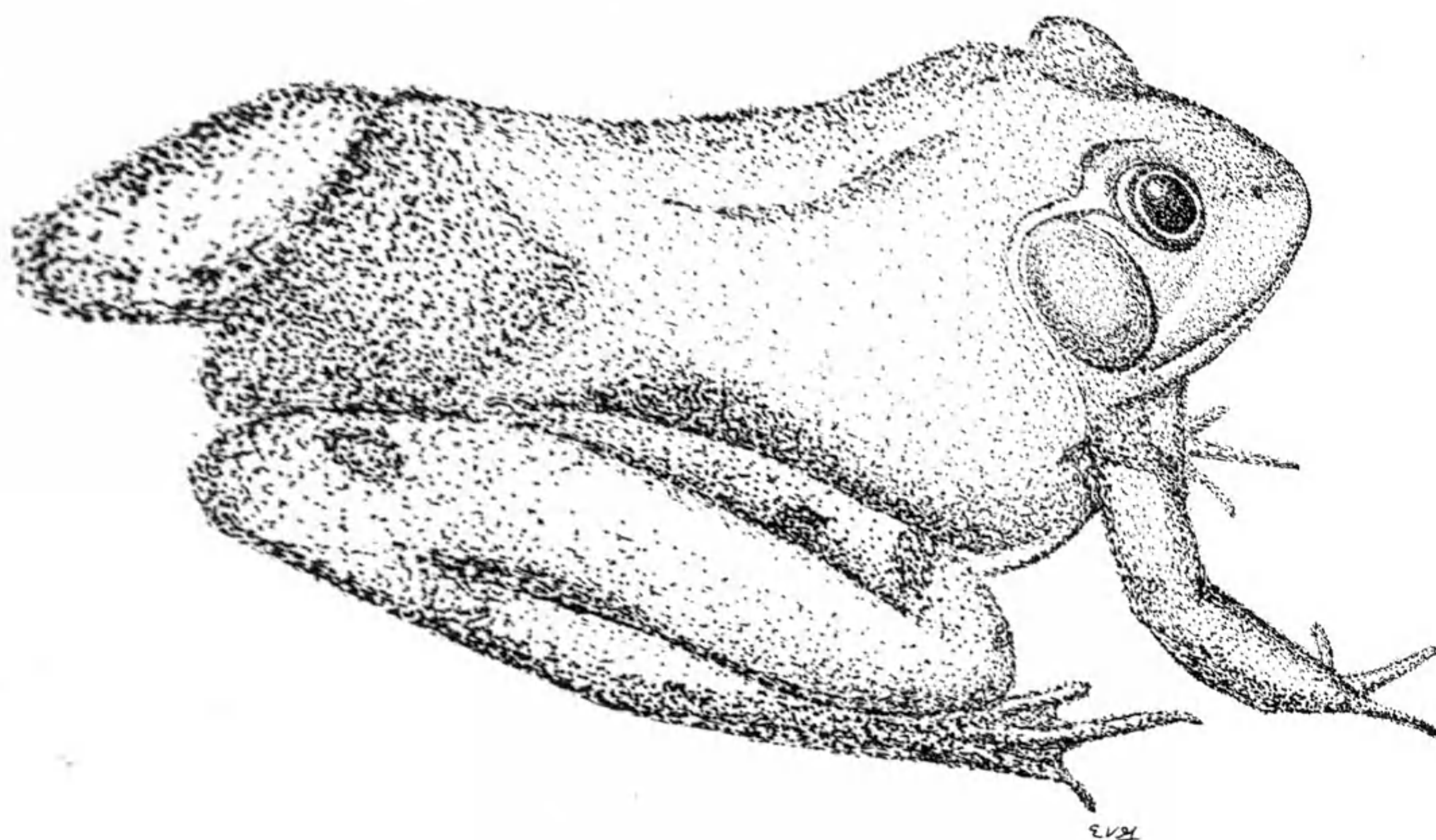


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BULLETIN OF THE VIRGINIA HERPETOLOGICAL SOCIETY

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C A T E S B E I A N A

Bulletin of the Virginia Herpetological Society

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BULLETIN INFORMATION

The Bulletin of the Virginia Herpetological Society is issued twice a year by the Virginia Herpetological Society. Membership is open to all individuals interested in the study of amphibians and reptiles. Membership includes a subscription to Catesbeiana and admission to all meetings. Dues are \$5.00 per year and include Catesbeiana numbers 1 and 2 for that year. Dues are payable to: Laura Crews, Secretary-Treasurer, 412 Dunmore Drive, Newport News, VA 23602. Herpetological societies desiring exchange of publications should send copies of their society publications to Dr. Charles Neal, Dept. of Biology, Radford University, Radford, VA 24142.

MEETING NOTICE

The Spring Meeting of the VaHS will be held at Caroline High School, Bowling Green, Virginia on April 12, 1986. Mrs. Dale L. Brittle is hosting the meeting. See page 25 for complete details.

Cover: Rana catesbeiana by Eugene Gourley.

EDITORIAL POLICY

Catesbeiana replaced the formal name of the Bulletin of the Virginia Herpetological Society in 1981. Although the format of the bulletin changed dramatically, its adherence to the central theme of the science of Virginia herpetology has remained firm. Beginning with the editorship of F.J. Tobey (1958-1980) and continuing with D.A. Merkle (1981-1982) and J.C. Mitchell (1983-1985), the bulletin has published with few exceptions, only scientific information and news on the herps of Virginia. We will maintain that tradition. During several meetings in 1980 and 1981, brief discussions addressed this point. It was agreed that Catesbeiana will publish articles pertaining to herpetology outside of Virginia only if sufficient material is not available. Articles pertaining to species found in Virginia will take precedence over those which do not. Rarely, if ever, will articles be reprinted in Catesbeiana after they have been published elsewhere. Contributors should contact one of the coeditors if they have any questions. Manuscripts should be submitted to either Dr. Eugene Gourley or Dr. Charles Neal, coeditors, Department of Biology, Radford University; Radford, VA 24142.

MAJOR PAPERS

Manuscripts being submitted for publication should be typewritten (doubled spaced) on good quality 8 1/2 by 11 inch paper, with adequate margins. Consult the style of articles in this issue for additional information. Articles will be reviewed by at least one officer (past or present) of the VaHS in addition to the coeditors. All changes should be approved by the author before publication. Thus, manuscripts should be submitted well in advance of March or September.

Reprints of articles are not available to authors, however, authors may reprint articles themselves to meet professional needs.

FIELD NOTES

This section provides a means of publishing natural history information on Virginia's amphibians and reptiles that does not lend itself to full-length articles. Observations on geographic distribution, ecology, reproduction, phenology, behavior and other areas are welcomed. Reports can be on a single species, groups of species or fauna from selected areas, such as a state park or county. The format of the reports is TITLE (species or area), COUNTY AND LOCATION, DATE OF OBSERVATION, OBSERVERS, DATA and OBSERVATIONS. Names and addresses of authors should appear one line below the report. Consult published notes or a coeditor if your information does not readily fit this format.

If the note contains information on geographic distribution, a voucher specimen or color slide should be sent for verification and deposited in a permanent museum or sent to the VaHS. Species identification for observational records should be verified by a second person.

The correct citation format: Croy, S. 1984. Field notes: Lampropeltis getulus niger. Catesbeiana 4(1):12.

Herpetological artwork is welcomed. If the artwork has been published elsewhere, we will need to obtain the copyright before we can use it in an issue. We need drawings and encourage members to send us anything appropriate, especially their own work.

THE HERPETOFAUNA OF ALLEGHANY COUNTY, VIRGINIA
PART 3. CLASS REPTILIA

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The first two parts of this ongoing serial treatment of the cold-blooded tetrapods inhabiting Alleghany County, Virginia, appeared in Catesbeiana, volume 5, nos. 1 and 2, 1985. The introductory remarks recorded in Part II apply equally well to the following entries.

Where 26 species of amphibians were established for the county, with three others likely to be added, the comparable figures for reptiles stand now at 28 and three, respectively. If all of the probables were eventually obtained, the total number of local species would be 60, a figure scarcely to be surpassed elsewhere in the Commonwealth and one reflecting the herpetian diversity of the upper James River region. No attempt was made to preserve voucher material until 1943, and this is regrettable because many reptiles, snakes in particular, were observed prior to that time, often kept alive for a few weeks and released. In 1944 a program was commenced in which complete scale-count data were taken for all snakes secured, particularly those which were subsequently released. Regrettably, the data sheets and extensive field notes made during the period 1943-1945 were lost while on loan to a colleague, around 1955. Prior to 1945 all field work was conducted on foot, which meant that one or more pairs of eyes scanned many back roads closely for many collector-hours, producing far more material than would be noticed by somebody driving over the same routes even at slow speeds.

Iguanidae

27. Sceloporus undulatus hyacinthinus (Green). Generally countywide at low and moderate elevations (not recorded above 3000 feet), this lizard seems especially abundant in second-growth pine woods over shale. Records for Clifton Forge, Longdale (UMMZ), Griffith, Pott Creek, Falling Springs.

A female collected June 24, 1945, was found to contain numerous mature eggs, probably to have been deposited within a week of the collection date.

Teiidae

28. Cnemidophorus sexlineatus (Linnaeus). During 1943-45 specimens of this species were not uncommon at Clifton Forge, well within the urbanized areas; subsequently fewer were seen. It is relatively abundant along the Chesapeake & Ohio right-of-way at Griffith although no real

effort has been made to obtain a large series at that locality. One found along Wilson Creek, east of Clifton Forge, June 13, 1945, and another from a shale barren along Potts Creek, 4 miles southwest of Covington, July 19, 1947. The latter specimen is, I believe, the inlandmost known for Virginia and having been collected about 25 miles from the West Virginia state line, permits the assumption that Cnemidophorus may eventually be found in the small fragment of that state drained by the headwaters of Potts Creek. None of the Alleghany County racerunners were found above 1200 ft., most were found within 100 feet of a stream.

I based the subspecific name C.s. pauciporus upon material from Virginia and Maryland having a reduced femoral pore count and a tendency for the parietal scales to become subdivided. The type locality for this taxon is Griffith. Although the validity of pauciporus was subsequently impugned by Duellman & Zweifel (1962), I suspect that a re-examination of the case based on larger series of specimens might well vindicate the premise that the northeasternmost populations of sexlineatus warrent being set off as a distinct terminal subspecies.

Scincidae

29. Eumeces anthracinus anthracinus (Baird). First recorded from Virginia (Hoffman, 1944a) on the basis of specimens taken near Clifton Forge, mostly along Cty. Hy. 606 from the northern city limits to McGraw's Gap, with the majority of the six or seven finds from the latter locality. Two have been found along the crest of Middle Mountain at about 2800 ft., beneath flat slabs of sandstone. Those from the several Rt. 606 sites were either crossing the road or under large partly embedded boulders beside it. Four finds were made in March, one in April, and one in late June. Specific attempts to collect this species in subsequent years have been unsuccessful despite centering on the precise areas where anthracinus was found earlier. Insofar as I can tell there is no preference shown for any particular biotope.

This is the species erroneously listed as Leiolopisma unicolor in my 1945 list.

30. Eumeces fasciatus (Linnaeus). Not uncommon at Clifton Forge, found there by W.D. Appell in 1910 as well as by me during the 1940s. Other localities include Falling Springs Station and White Rock Gap (6 miles SW of Lowmoor at 1600 ft.), where two specimens were taken under loose bark of an old log May 10, 1950. In general this species seems partial to dry pine woods, old buildings, and sawmill sites, at low to moderate elevations. Found as early as mid-March at Clifton Forge, under pine bark on the ground.

31. Eumeces inexpectatus Taylor. One specimen was found beneath a board just north of Clifton Forge on April 22, 1945, the event being chronicled in a short note (Hoffman, 1945b) describing the site and mentioning its

biogeographic interest. At that time there were no other Virginia localities outside the southeastern coastal plain. Despite frequent returns to the vicinity and highly motivated searches, no other specimens have ever been found there or elsewhere. The species must be regarded as highly secretive or scarce (?both) at Clifton Forge.

32. Eumeces laticeps (Schneider). Prior to 1944 I saw the spectacular adult males of this species fairly often on the steep shale cliffs along larger streams. The only specimen actually preserved is an adult female found in Clifton Forge on May 8, 1944 (USNM 127592).

Colubridae

33. Carphophis amoenus amoenus (Say). Not uncommon around Clifton Forge, also along the Cowpasture River at Griffith; found at Longdale by H.K. Gloyd (UMMZ). Usually under flat stones or similar shelter on soft loamy soil, often associated with termites. Most of the collection records for 1944-1945 are from May. No finds above 1200 ft.

34. Diadophis punctatus edwardsi (Merrem). Essentially county-wide at low to moderate elevations. Not uncommon at Clifton Forge, found also at McGraw's Gap, Falling Springs station, and Island Ford (between Lowmoor and Covington). During the "snakes-as-pets" years I used to find ring-neck snakes almost at will by turning small stones along Smith Creek where it passed through the less built-up parts of Clifton Forge. Most of the specimens found this way were small (less than a foot in length).

35. Opheodrys aestivus aestivus (Linnaeus). Uncommon at Clifton Forge, several kept as pets prior to 1944, only three preserved subsequently in 1944 and 1946. Obviously a lowland form here, not found above 1100 ft.

36. Opheodrys vernalis vernalis (Harland). Somewhat more abundant than its larger congener, the smooth green snake was recorded around Clifton Forge several times a year up to 1950 when the last was found. Lowest localities are about 1100 feet, and I have no records above 1600 ft. although elsewhere in western Virginia the species ascends to at least 4000 ft. Most specimens were found DOR or crossing back roads and trails.

37. Coluber constrictor constrictor (Linnaeus). Decidedly scarce! A few captured as temporary pets prior to 1944, then one subadult on May 4, 1944.

38. Heterodon platyrhinos platyrhinos (Latreille). Not uncommon along the larger stream courses, with the melanistic phase occasionally seen. Records for Clifton Forge, Covington, Longdale (UMMZ) and White Rock Valley, all sites below 2000 feet.

39. Elaphe guttata guttata (Linnaeus). Corn snakes were at one time not uncommon around Clifton Forge. W.D. Appell obtained one (USNM) in 1910. My own records indicate that five were found in 1943, eight in 1944, two in 1945, one in 1946, two in 1949, and one in 1950, a few of these being found DOR. Comparison of the collection sites suggest some preference for second-growth oak-pine woods on shale hills at low elevations (none found above 1100 feet).

40. Elaphe obsoleta obsoleta (Say). Common and widespread over the entire county, up to nearly 4000 feet on Warm Spring Mountain.

41. Pituophis melanoleucus melanoleucus (Daudin). Very scarce, only two subadults found, one headless, in a small stream in Clifton Forge in 1943, a second DOR near Lowmoor, June 14, 1944. Both sites below 1100 feet.

42. Lampropeltis triangulum triangulum (Lacepede). Widespread, especially at moderate to higher elevations, but not abundant. Records for Fore and Middle Mountains, NW of Clifton Forge; Longdale (UMMZ), Richpatch; and Falling Springs. Most often collected beneath flat sandstone slabs along the crest of the two mountain ridges mentioned above.

43. Cemophora coccinea copei (Jan). One half-grown specimen found DOR on the shoulder of U.S. Hy. 60, about one-half mile west of Covington on June 14, 1944. Although badly flattened and desiccated, the specimen responded to treatment in a hot detergent solution, and on being thus restored was sent for examination to both Dr. Roger Conant and Dr. A.B. Grobman. It is at present deposited in the National Museum of Natural History. It might be asserted that the site of the discovery argues in favor of an escaped captive dropping out of an automobile only to be quickly flattened by another. My personal inclination is to regard the species as endemic in the region, but secretive and not likely to be often found, analogous to Eumeces inexpectatus.

44. Virginia valeriae valeriae Baird & Girard. A single specimen found under a flat stone partly imbedded in a grassy field at Lowmoor, December 10, 1945. Other known state localities for this snake lie east of the Blue Ridge.

45. Storeria dekayi dekayi (Holbrook). Certainly uncommon in Alleghany County, where to my knowledge only two specimens have been obtained. One was found in a residence three miles east of Clifton Forge and presented to me by the householder in March, 1949. The second was found by J. C. Mitchell beneath a decomposing railroad tie along the C & O RR right-of-way at the Cowpasture River, August 29, 1984. The two localities are about one mile apart, in a region of Devonian shale with second growth pine and oak woods.

46. Storeria occipitomaculata occipitomaculata (Storer). Nearly all specimens of this little snake have been found along cty. Rt. 606 between Clifton Forge and McGraw's Gap, mostly DOR. Two preserved specimens are dated June 19, 1947 and May 7, 1950. An adult was found in the shale country north of Clifton Forge on March 17, 1945, in an accumulation of decomposing leaves. None of the localities is above 1400 ft.

47. Nerodia sipedon sipedon (Linnaeus). As elsewhere in Virginia, this water snake is common and widespread in a wide variety of aquatic habitats at lower elevations over the county. During the 1940s it was especially abundant along small streams coursing through Clifton Forge and it was considered a matter of some accomplishment to capture large adults. Such specimens were most often seen sunning in brush and shrubs overhanging the streams, and were usually obtained by the use of a snare on the end of an extended fly rod. A surprising number of such captives became good pets, with quiet dispositions and good feeding habits.

48. Thamnophis sirtalis sirtalis (Linnaeus). Field notes record that this species was rarely seen subsequent to 1943, when a considerable number were found in the vicinity of Clifton Forge. Garter snakes have been found as high as 3500 feet along the crest of Warm Springs Mountain. I have, however, no records for other parts of the county. W.D. Appel obtained two specimens at Clifton Forge in 1910.

49. Agkistrodon contortrix mokeson (Daudin). Copperheads are among the most widespread and frequently encountered snakes in Alleghany County. I have records for Clifton Forge, Richpatch, Roaring Run Gap, and Falling Springs, and H.K. Gloyd obtained it at Longdale. In 1943 a small den site was discovered along the crest of Middle Mountain (ca. four miles NNE of Clifton Forge), in a cavity beneath an enormous sandstone boulder. On this occasion four copperheads and a medium sized rattlesnake were extricated but not captured, on subsequent visits several copperheads in the 24-28 inch size range were taken as temporary pets. One of these, a female about 26 inches long, gave birth to four young on August 10, 1944.

50. Crotalus horridus horridus (Linnaeus). Likewise widespread in the county but much less frequently seen than the copperhead. Records for Clifton Forge, Middle Mountain, Richpatch, Warm Spring Mountain at about 3800 ft., and Longdale (11 miles east of Clifton Forge). A specimen from the last locality was illustrated in Gloyd's 1940 monograph on the rattlesnakes.

Chelydridae

51. Chelydra serpentina serpentina (Linnaeus). Common and widespread in Alleghany County in both the Jackson and Cowpasture Rivers, but also in remarkably small streams far back in the mountains. Records for Clifton Forge, Richpatch, Falling Springs, and Griffith.

Kinosternidae

52. Sternotherus odoratus (Latreille). The musk turtle is likewise countywide in distribution but distinctly more restricted to larger streams, records existing for Clifton Forge, Sharon Church on the Cowpasture River at Longdale, Griffith, and Falling Springs, one specimen from each place and none seen since June, 1945.

Emydidae

53. Chrysemys picta picta (Schneider). As the preceeding, countywide in larger streams and ponds, below 1200 ft. Clifton Forge, Griffith, Falling Springs, Boiling Spring School. The majority of specimens seen from this region (including the Cowpasture River in Bath County) have a median, black plastral spot of variable form, but the alignment of the dorsal plates is invariably typical of the eastern subspecies under which name it is here recorded.

54. Terrapene carolina carolina (Linnaeus). Countywide and abundant, often seen as high as 3000 feet on Warm Springs Mountain.

With the preceding entry the list of reptilian species is concluded. The fourth and final part of this series will contain a chorographic summary of the fauna with particular reference to the montane occurrences of typically austral taxa.

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THE HERPETOFAUNA OF
CALEDON STATE PARK, VIRGINIA

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The Caledon Task Force was appointed in 1982 by the Governor of Virginia and charged with the responsibility to develop a management plan for a proposed Caledon State Park, an area of over 2,500 acres in King George County. Caledon State Park is located 70 miles south of Washington, D.C. and features two miles of Potomac River shoreline, a freshwater pond, several marshes and a variety of timber types and other habitats.

This report summarizes the amphibian and reptile survey, part of a larger faunal survey, begun in March of 1983 which inventoried the bird, mammal, amphibian and reptile communities of the property. More than 80 days were spent on the property collecting data, which were keyed to habitat type so that comparisons could be made with data collected during concurrent studies of other resources on the property.

Materials and Methods

Vertebrate fauna sampling at Caledon State Park was based on the habitat types delineated in the Virginia Division of Forestry's timber land classification. This report recognized seven habitat types based on age and species composition of the forest. Sampling units were established in each habitat type based on the relative acreage, with one sampling unit in each of the smaller habitat types (less than 100 acres), two sampling units each in the Second Deciduous Forest (SG) and Bottomland Deciduous Forest (BF), three in the Mature Deciduous Forest (MF), and four in the Mixed Deciduous-Coniferous Forest (DC).

Approximate locations for sampling units were established on the timber type map included in the forester's report. Actual locations for sampling units were established during on-site inspections of each habitat type. During the spring, summer and fall sampling periods the presence of reptiles and amphibians was determined using four methods: checking drift fences and arrays, intensive ground searches during the day, driving the roads after dark and random encounters during bird and mammal surveys or during any other time spent on the property.

Drift fence arrays consisted of aluminum flashing, buried 1-2 cm. and 30 cm. high, placed in a 3-arm radiating pattern with cans (2 #10 taped together vertically) sunk in the center and at the end of each arm. After the spring sampling period, it was determined that drift fence arrays were not productive enough in consideration of the expense of materials and labor involved to justify their use in all habitats and two drift fences near the small marsh in the Second Growth Deciduous Forest were left standing, with the cans covered, at the end of the spring sampling period. These were reset and run for a period of three to five days at the beginning of the summer season, but were not picked up and moved to other habitats as during the spring season. In addition, a drift fence made up a spare 25-foot section of flashing was set up in the Bottomland Deciduous Forest and run for 13 days.

During the fall sampling period, a drift fence was used in the Bottomland Deciduous Forest during the first six days of the period. Since very few animals were captured using this method, intensive ground searches were conducted frequently during the fall period. These ground searches during the day consisted of walking through habitats and turning over rocks, rotting logs, or other debris on the forest floor, capturing and noting the presence of reptiles or amphibians underneath these objects. Also, some frogs and toads were identified by their vocalizations during this survey.

Reptiles and amphibians were often encountered while the observer was checking small mammal traps or while walking rails into sampling units. A reference collection of at least one individual of each species of reptile and amphibian encountered at Caledon was made by collecting individual specimens and preserving them in formalin. Specimens were deposited at George Mason University, Fairfax, Virginia.

In addition to the seven timber types included in the forester's report, data were collected on the herptile fauna at eight additional sampling sites including: Boyd's Hole (BH), a small area at which several habitats come together, including woods, a small marshy area, a surrounding thicket and the Potomac River and Beach (PR and PB); Caledon Marsh (CM), a large marsh of about 70 acres located along the Potomac River near the western edge of the property; Jones Pond (JP) at the extreme eastern end, which included the pond itself, several small islands of floating vegetation, and a surrounding thicket edge; Mount Stuart (MS), a privately owned inholding with an open area of mowed grass along the southern edge of the property and adjacent to Rt. 218; the Potomac River (PR), which forms the northern boundary of the property; the Potomac River Beach (PB); the Smoot Inholding (SI) of about 50 acres which included a large, open area of mowed fields surrounded by a wooded edge and several buildings with planted trees and shrubbery; and Caledon Triangle (CT) a roughly triangular-shaped field at the intersection of the two main roads through the property.

The winter sampling season ran from March 10-30, 1983 and is considered to be a winter-spring transitional period rather than a strictly winter sampling period. Weather conditions during this period included several rainy days, but generally cool, dry conditions prevailed. The spring sampling period took place May 9 - June 2. Weather conditions were generally favorable during the spring season. Morning rain occurred only once during the sampling period, while afternoon showers occurred several times but did not affect sampling procedures to any appreciable degree.

The summer sampling season began July 22 and ended August 12, 1983. During this period little rain fell, resulting in extremely dry conditions. Caledon Marsh (see Fig. 1), the small marsh in the Second Growth Forest and a marshy area along the Potomac River remained wet, but most creeks and other wet areas on the property dried up. This may have adversely affected sampling for vertebrates, particularly amphibians and reptiles, but the extent of this effect could be determined only by sampling during the same period in a year with normal rainfall.

The fall sampling period began October 15 and ended November 14, 1983. During this period generally cool, dry weather predominated. Only a few small, temporary ponds were located but since only one amphibian, the marbled salamander, is known to rely on such ponds in fall for breeding purposes, the dry conditions were probably an unimportant influence on reptile and amphibian sampling. None of the three-day sampling periods were interrupted due to foul weather, but activities were halted twice between census periods due to adverse weather conditions and later resumed.

Results and Discussion

A list of all reptiles and amphibians encountered at Caledon by season and habitat type is presented in Table 1. Thirty-nine species of reptiles and amphibians were observed during the four sampling periods. A complete list of scientific names of reptiles and amphibians both observed and expected (Conant, 1975) at Caledon is given in Table 2.

Reptiles and amphibians were found to be fairly habitat-specific. Species which prefer sandy soil, such as a marbled salamander, worm snake, and spadefoot toad were found mostly at the eastern end of Caledon, where sandy soils predominated. Species preferring permanent pond habitats such as the painted, mud and red-bellied turtles, the adult form of the red-spotted newt, bullfrog, green frog, and northern water snake were usually found at Jones Pond or Caledon marsh. Stream-dwelling species such as the two-lined and northern dusky salamanders were found in Mature Forest streams. Temporary ponds supported a wide variety of breeding species including the spotted salamander; spotted turtle; Fowler's, American, and spadefoot toads; spring peeper; gray treefrog and northern cricket frog. Temporary ponds were found throughout the less hilly terrain at Caledon, especially during the spring season. One species, the red-

back salamander, was found in every terrestrial habitat except the clearcut and riverfront beach. Within the mixed Deciduous-Coniferous Forest, 23 species of reptiles and amphibians were found, whereas the Clearcut (CS) and Open Field (OF) yielded only three and four species, respectively.

Caledon supports an impressive variety of amphibians. For example, of 15 species of frogs and toads predicted to occur on the property, all but three were found. The overall population levels and diversity of reptiles and amphibians at Caledon were judged at the time of the study to be healthy, precluding the immediate need for specific management activities for reptiles and amphibians. Future observations are needed to determine if additional species are present in this unique, and now protected, coastal property.

Acknowledgements

We thank the following individuals for their help in planning and conducting the study: K. Cline, B. Kennedy, M. LeFranc, J. Marshall, B. Millsap, and D. Miller. D. Miller of the National Wildlife Federation also served as project director. Special appreciation is also extended to the Virginia Division of Parks and Recreation for providing financial support.

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Table 1. List of reptiles and amphibians recorded during four seasons of observation in Caledon State Park, King George County, Virginia, 1983.

	Winter	Spring	Summer	Fall
Eastern Mud Turtle	----	DC, PB	----	CM
Spotted Turtle	----	DC	----	----
Eastern Box Turtle	----	MF, DC	BF, DC	BF, DC
Redbelly Turtle	----	----	JP, CM	----
Eastern Painted Turtle	----	----	----	JP
Northern Fence Lizard	DC	BF	----	----
Ground Skink	----	DC	----	----
Northern Five-Lined Skink	----	MF, BF, PB	MF, SG, DC, PB	DC
Southeastern Five-Lined Skink	----	----	----	SG
Broad-head Skink	----	DC	----	----
Northern Water Snake	----	BF, OF	----	----
Northern Brown Snake	----	----	DC	----
Eastern Garter Snake	----	DC	----	DC
Eastern Worm Snake	----	DC	----	DC
Northern Black Racer	----	MF, WS, DC	----	----
Ringneck Snake	----	----	----	MF
Rough Green Snake	----	----	CM	----
Black Rat Snake	----	DC	----	----
Copperhead	----	DC	----	----
Red-spotted Newt	----	----	----	CM
Spotted Salamander	----	MF, BF, DC	----	SG, BF
Marbled Salamander	----	BF	----	DC
Four-toed Salamander	----	----	BF	----
Redback Salamander	DC	----	----	MF, SG, WS, BF, OF, DC
Slimy Salamander	----	----	----	MF
Northern Dusky Salamander	----	----	----	MF
Northern Two-lined Salamander	----	----	----	MF, WS
Eastern Spadefoot	----	BF	BF	BF
Eastern American Toad	----	MF, SG, BF, DC	MF, CF, SG, DC	SG
Fowler's Toad	----	WS, BF, OF, DC, PB, JP	BF, OF, DC, PB, JP	BF
Northern Cricket Frog	----	WS, BF, DC, CM	MF, DC	SG, BF, DC
Northern Spring Peeper	OF, DC, BH	MF	MF, CF, SG, DC	MF, CS, SG, WS, DC
Green Treefrog	----	DC	CM	----
Gray Treefrog	----	MF, OF, DC, SM	MF, CM	----
Bullfrog	----	BF, DC, JP	JP, BH	----
Green Frog	----	MF, SG, JP, CM, SM	----	----
Wood Frog	----	----	MF	----
Southern Leopard Frog	----	----	MF, BF, JP, CM, BH	DC
Pickerel Frog	----	----	JP	----

MF - Mature Forest
 CS - Clearcut Stand
 SG - Second Growth Forest
 WS - White Oak Swamp
 BF - Bottomland Deciduous Forest
 OF - Open Field

DC - Mixed Deciduous-Coniferous Forest
 PB - Potomac River Beach
 JP - Jones Pond
 CM - Caledon Marsh
 BH - Boyd's Hole
 SM - Smoot Marsh SW of Caledon Marsh

Table 2. Complete list of reptiles and amphibians both observed (O) and expected (E) but not found on Caledon Sate Park, King George County, VA.

Common Snapping Turtle	<u>Chelydra serpentina</u>	(E)
Eastern Mud Turtle	<u>Kinosternon subrubrum</u>	(O)
Spotted Turtle	<u>Clemmys guttata</u>	(O)
Eastern Box Turtle	<u>Terrapene carolina</u>	(O)
Northern Diamondback Terrapin	<u>Malaclemys terrapin</u>	(E)
Redbelly Turtle	<u>Pseudemys rubriventris</u>	(O)
Eastern Painted Turtle	<u>C. picta</u>	(O)
Northern Fence Lizard	<u>Sceloporus undulatus</u>	(O)
Ground Skink	<u>Scincella lateralis</u>	(O)
Northern Five-lined Skink	<u>Eumeces fasciatus</u>	(O)
Southeastern Five-lined Skink	<u>E. inexpectatus</u>	(O)
Broad-head Skink	<u>E. laticeps</u>	(O)
Six-lined Racerunner	<u>Cnemidophorus sexlineatus</u>	(E)
Northern Water Snake	<u>Nerodia sipedon</u>	(O)
Queen Snake	<u>Regina septemvittata</u>	(E)
Northern Brown Snake	<u>Storeria dekayi</u>	(O)
Northern Redbelly Snake	<u>S. occipitomaculata</u>	(E)
Eastern Ribbon Snake	<u>Thamnophis sauritus</u>	(E)
Eastern Garter Snake	<u>T. sirtalis</u>	(O)
Eastern Worm Snake	<u>Carphophis amoenus</u>	(O)
Eastern Earth Snake	<u>Virginia valeriae</u>	(E)
Eastern Hognose Snake	<u>Heterodon platyrhinos</u>	(E)
Northern Black Racer	<u>Coluber constrictor</u>	(O)
Northern Ringneck Snake	<u>Diadophis punctatus</u>	(O)
Rough Green Snake	<u>Opheodrys aestivus</u>	(O)
Rainbow Snake	<u>Farancia erytrogramma</u>	(E)
Black Rat Snake	<u>Elaphe obsoleta</u>	(O)
Corn Snake	<u>E. guttata</u>	(E)
Northern Scarlet Snake	<u>Cemophora coccinea</u>	(E)
Eastern Milk Snake	<u>Lampropeltis t. triangulum</u>	
	<u>x L.t. elapsoides</u>	(E)
Mole Kingsnake	<u>L. calligaster</u>	(E)
Eastern Kingsnake	<u>L. getulus</u>	(E)
Copperhead	<u>Agkistrodon contortrix</u>	(O)
Greater Siren	<u>Siren lacertina</u>	(E)
Red-spotted Newt	<u>Notophthalmus viridescens</u>	(O)
Eastern Tiger Salamander	<u>Ambystoma tigrinum</u>	(E)
Spotted Salamander	<u>Ambystoma maculatum</u>	(O)
Marbled Salamander	<u>A. opacum</u>	(O)
Northern Red Salamander	<u>Pseudotriton ruber</u>	(E)
Eastern Mud Salamander	<u>P. montanus</u>	(E)
Four-toed Salamander	<u>Hemidaactylum scutatum</u>	(O)
Redback Salamander	<u>Plethodon cinereus</u>	(O)
Slimy Salamander	<u>P. glutinosus</u>	(O)
Northern Dusky Salamander	<u>Desmognathus fuscus</u>	(O)
Northern Two-lined Salamander	<u>Eurycea bislineata</u>	(O)
Three-lined Salamander	<u>E. longicauda</u>	(E)
Eastern Narrowmouth Toad	<u>Gastrophryne carolinensis</u>	(E)
Eastern Spadefoot	<u>Scaphiopus holbrooki</u>	(O)

Table 2. (Cont.)

Eastern American Toad	<u>Bufo americanus</u>	(0)
Fowler's Toad	<u>B. woodhousei</u>	(0)
Northern Cricket Frog	<u>Acris crepitans</u>	(0)
Northern Spring Peeper	<u>Hyla crucifer</u>	(0)
Green Treefrog	<u>H. cinerea</u>	(0)
Gray Treefrog	<u>H. versicolor</u>	(E) *
Gray Treefrog	<u>H. chrysoscelis</u>	(0) *
Upland Chorus Frog	<u>Pseudacris triseriata</u>	(E)
Bullfrog	<u>Rana catesbeiana</u>	(0)
Green Frog	<u>R. clamitans</u>	(0)
Wood Frog	<u>R. sylvatica</u>	(0)
Southern Leopard Frog	<u>R. utricularia</u>	(0)
Pickerel Frog	<u>R. palustris</u>	(0)

* Positive identification of the gray treefrog was not made. Based on range alone, it is probable that only H. chrysoscelis was present.

A Range Extension for Leurognathus marmoratus Moore in
Smyth County, Virginia

Charles M. Neal and Eugene V. Gourley
Department of Biology
Radford University
Radford, VA 24142

The shovelnose salamander, Leurognathus marmoratus Moore has been reported from only four localities in Virginia: the Blue Ridge Parkway in Floyd County (Conant 1975a, 1975b); in Big Branch, Smyth County (Hoffman and Hoffman 1956; Gourley and Neal 1982); Daves Branch, Smyth County (Gourley 1979; Gourley and Neal 1982) and Laurel Creek, Washington County (Pague and Mitchell 1984). Pague and Mitchell (1984) described the single specimen of L. marmoratus collected in 1958 in Laurel Creek. This specimen is in the American Museum of Natural History collection and had been incorrectly identified as Desmognathus quadramaculatus. To our knowledge, the Floyd County and Washington County localities have not been confirmed.

In June, 1985 we collected Leurognathus marmoratus at two new locations in Smyth County, Virginia. Two adult specimens (snout-vent lengths of 68 mm and 72 mm) were collected in Grassy Branch at an elevation of 3500 feet. Two adult L. marmoratus (snout-vent lengths of 66 mm and 75 mm) were also collected in Charlies Branch at an elevation of 3700 feet. Elevations were measured with a Lietz altimeter. Grassy Branch and Charlies Branch are both tributaries of Big Laurel Creek (Figure 1). These four specimens are now in the Radford University collection.

Current information suggests that Leurognathus marmoratus is well-established in Virginia only in tributaries of Big Laurel Creek. Daves Branch, Big Branch, Charlies Branch and Grassy Branch appear to have viable populations. Attempts to collect L. marmoratus in Grindstone Branch have not been successful. We are continuing to monitor the densities of the Big Branch and Daves Branch populations.

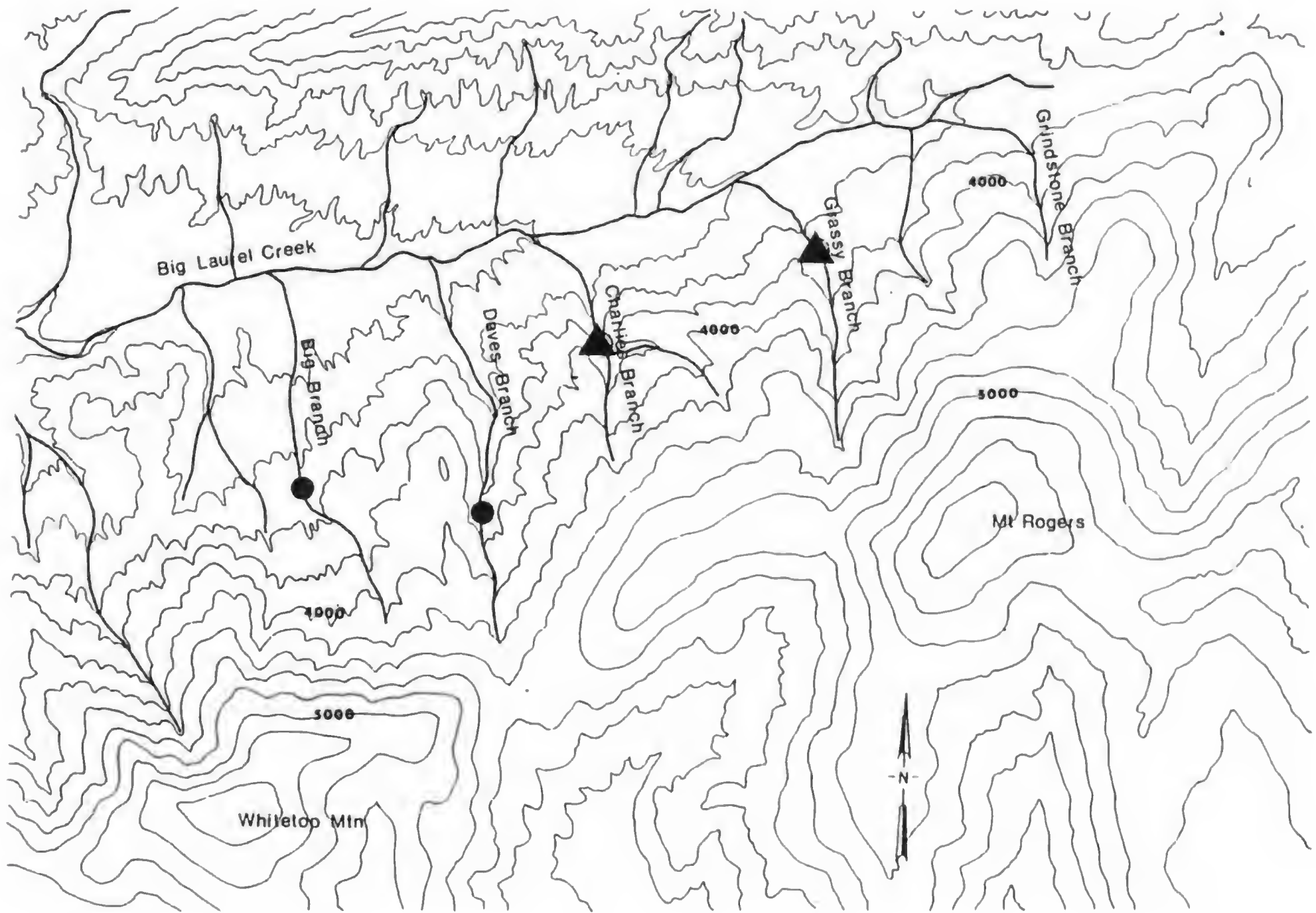


Figure 1. Localities in the Big Laurel Creek drainage, Smyth County, Virginia where Leurognathus marmoratus Moore has been collected. Closed circles represent previously known populations. Triangles represent new extensions of the range. Map is adapted from Whitetop Mountain Quadrangle, Virginia, 7.5 minute series (Topographic) 219-NE, U.S. Geological Survey map.

LITERATURE CITED

- Conant, R. 1975a. A field guide to the reptiles and amphibians of eastern and central North America. Houghton Mifflin Co., Boston Mass. 429 pp.
- _____, 1975b. Personal communication to R. L. Hoffman.
- Gourley, E. V. 1979. Leurognathus marmoratus Moore - shovel-nosed salamander. Status report for the U.S. Forest Service.
- Gourley, E. V. and C. M. Neal. 1982. Population estimates of Leurognathus marmoratus Moore and Desmognathus quadramaculatus (Holbrook) at Whitetop Mountain, Virginia. Catesbeiana 2(1): 4-8.
- Hoffman, R. L. and R. B. Hoffman. 1956. Leurognathus marmoratus Moore in Virginia. Chicago Acad. Sci., Nat. Hist. Mus. (152): 1-2.
- Pague, C. A. and J. C. Mitchell. 1984. A fourth locality for the shovel-nose salamander, Leurognathus marmoratus, in Virginia. Catesbeiana 4(1): 5-6.

FIELD NOTES

Heterodon platyrhinos (Eastern Hognose Snake): Prince George County, St. Rt. 40, 1.9 km N of Co. Rt. 615 and 6.1 km S of Spring Grove. September 30, 1985. D. Schwab.

Road-killed dark phase female eastern hognose snake. Linzey and Clifford (1981, Snakes of Virginia, Univ. of Virginia Press, Charlottesville) show no records of this species from Prince George County. The specimen will be donated to the Smithsonian Institution via the collection of C.A. Pague.

Don Schwab, Virginia Commission of Game and Inland Fisheries, P. O. Box 847, Suffolk, VA 23434.

NEWS AND NOTES

MINUTES

VaHS Fall Meeting, 10-5-85

Eleven people were in attendance, and socializing began at 9:00. Vice President Chris Pague opened the meeting at 10:20; President Bob Bader was in Australia. Laura Crews read the minutes from the April spring meeting.

Old Business

Chris read Ben Greishaw's Treasurer's report, since Ben was not present. The beginning balance in 1985 was \$420.03. In March, brochures and the Catesbeiana cover cost \$205.20; Volume Two cost \$173.44. With the receipt of dues, the balance as of October 4 was \$291.08. Ben was no longer available for the position of Treasurer.

Joe Mitchell gave his Editor's report. Seventy-one issues of Catesbeiana were sent to members and to gratis institutions; 16 issues were exchanged with other clubs, for a total of 87 sent at a cost of 1.88 each. Back issues of the Catesbeiana are available. Joe was no longer available for the position of editor.

The Virginia Herpetological Society hereby gratefully acknowledges and appreciates the efforts and dedication of its officers who stepped down from their positions this year. Thanks go to Bob Bader, President; Ben Greishaw, Treasurer; and Joe Mitchell, Editor, and to his wife and assistant, Wendy Mitchell.

It was noted that Edna Lynn Kunze died of cancer in summer of 1985. She was active both in herpetology and ornithology.

Frank Tobey was in the process of generating funds in order to publish his book of maps by the end of 1985.

New Business

The Treasurer will keep better, more detailed records and carefully distinguish which money is for dues and donations. Plans call for new stationery with preprinted names of officers. This will be after the current supplies are used up. Society brochures will be updated to reflect newly elected officers.

The idea of combining the Secretary and Treasurer positions was discussed. It was decided to keep them separate, but to allow one person to hold both offices at the same time.

Public relations will be a main concern this year. Wendy Mitchell plans to pursue advertising through the VPI Extension Bulletin. Laura Crews heads a "Membership Drive Committee" to pursue leads such as colleges, 4H groups, VPI Extension, captive husbandry and zoos. Joe Mitchell plans to contact the Game Commission, and possibly the State Fair.

"Reminder" post cards will be sent twice a year, approximately one month before each meeting, to members who have not paid dues.

Chris Pague suggested that twice-a-year communications among members is not enough. The membership roster published in Catesbeiana Volume 5 Number 2 was very well received; it was decided to publish it every fall issue.

In addition, for persons interested only in receiving the membership list, and not in joining the Society, updated brochures will include on the membership application the option of purchasing the roster for \$1.00. Along with this will be a section describing one's area of interest, including: reptiles, amphibians, captive husbandry, distribution, research, and specifics.

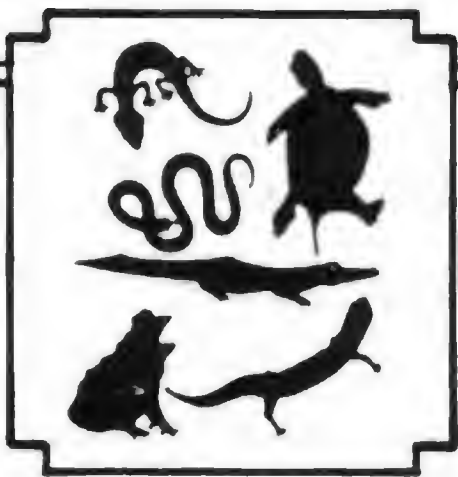
Elections of officers was next held, with the following choices:

President:	Richard Hoffman
Vice President:	Christopher Pague
Treasurer:	Laura Crews
Secretary:	Laura Crews
Coeditors:	Eugene Gourley and Charles Neal

Talks and papers presented in the afternoon included:

- "Herpetofauna of the New River Gorge, West Virginia," Kurt Buhlmann, VPI&SU.
- "Herps of Nepal," Joseph Mitchell, University of Richmond.
- "Herps of Barro Colorado Island, Panama," Paul Nicoletto, VPI&SU.
- "Herpetogeography of the Upper James River Basin in Virginia," Richard Hoffman, Radford University.

The spring meeting was selected to be held in the Fredericksburg area April 12, 1986.



◆ DIAMOND ANNIVERSARY ◆
10th INTERNATIONAL HERPETOLOGICAL
SYMPOSIUM

On Captive Propagation and Husbandry

San Antonio, Texas

June 25-28, 1986

The place to be on June 25-28, 1986, is San Antonio, Texas. These dates mark the Diamond Anniversary celebration of the 10th International Herpetological Symposium on Captive Propagation and Husbandry. Regardless of your interest in herpetology, this symposium is guaranteed to have a positive impact on each person who attends.

The El Tropicano Hotel, near the San Antonio River in beautiful San Antonio, will serve as the symposium site.

The four-day event is filled with activities to satisfy the hungriest of herpetologists while providing a unique setting for fellowship and the exchange of information. Twenty-five technical papers will be presented on a balanced selection of subject matter. The San Antonio Zoo, with one of the finest collections of reptiles and amphibians in the United States, will host a tour as well as accommodate a banquet supper.

Registration fee for the Diamond Anniversary Symposium is only \$69 if paid by May 30. Registration material can be obtained from Richard A. Hahn, Symposium Series Director, Zoological Consortium, Inc., 13019 Catoctin Furnace Road, Thurmont, Maryland, 21788. The registration fee after May 30 and at the door in San Antonio will be increased to \$85.

Your registration fee includes a copy of the conference's proceedings to be published in late 1986. In addition, the fee includes a social, two dinners, coffee breaks and bus transportation to special events. The social will be held at The Tower and includes beverage tickets. A Mexican supper has been planned featuring a barge ride down the scenic San Antonio River. The awards banquet and a barbeque will take place after the zoo tour.

Also planned for the Symposium, a popular feature, is an afternoon of workshops to provide concentrated sessions on several distinct topics.

The "Call for Papers" will continue until January 11. Keep in mind only 25 papers can be presented. Over half of the total have already been submitted for consideration. Anyone wishing to submit a paper should contact Karl Peterson, Houston Zoological Gardens, 1513 Outerbelt Drive, Houston, Texas, 77030, or call (713) 520-3226.

Special arrangements have also been made for spouses, children and guests who desire to attend only the special activities. Adults may do so for \$35 and only \$25 for children.

As customary, persons giving papers will pay a reduced registration fee of only \$35.

Each year, the International Herpetological Symposium proves to be the place to exchange valuable information while renewing old friendships and beginning new ones. This year's Diamond Anniversary Symposium will be no exception as over 300 herpetologists from the United States and foreign countries gather in San Antonio. Regardless of your interests and skills, the 10th International Herpetological Symposium on Captive Propagation and Husbandry will benefit everyone who attends.

Don't forget to mark the dates of June 25-28, 1986, on your calendar! See you in beautiful San Antonio, Texas, for the Diamond Anniversary Symposium.

Come to San Antonio and Help
'Polish the Diamond!'

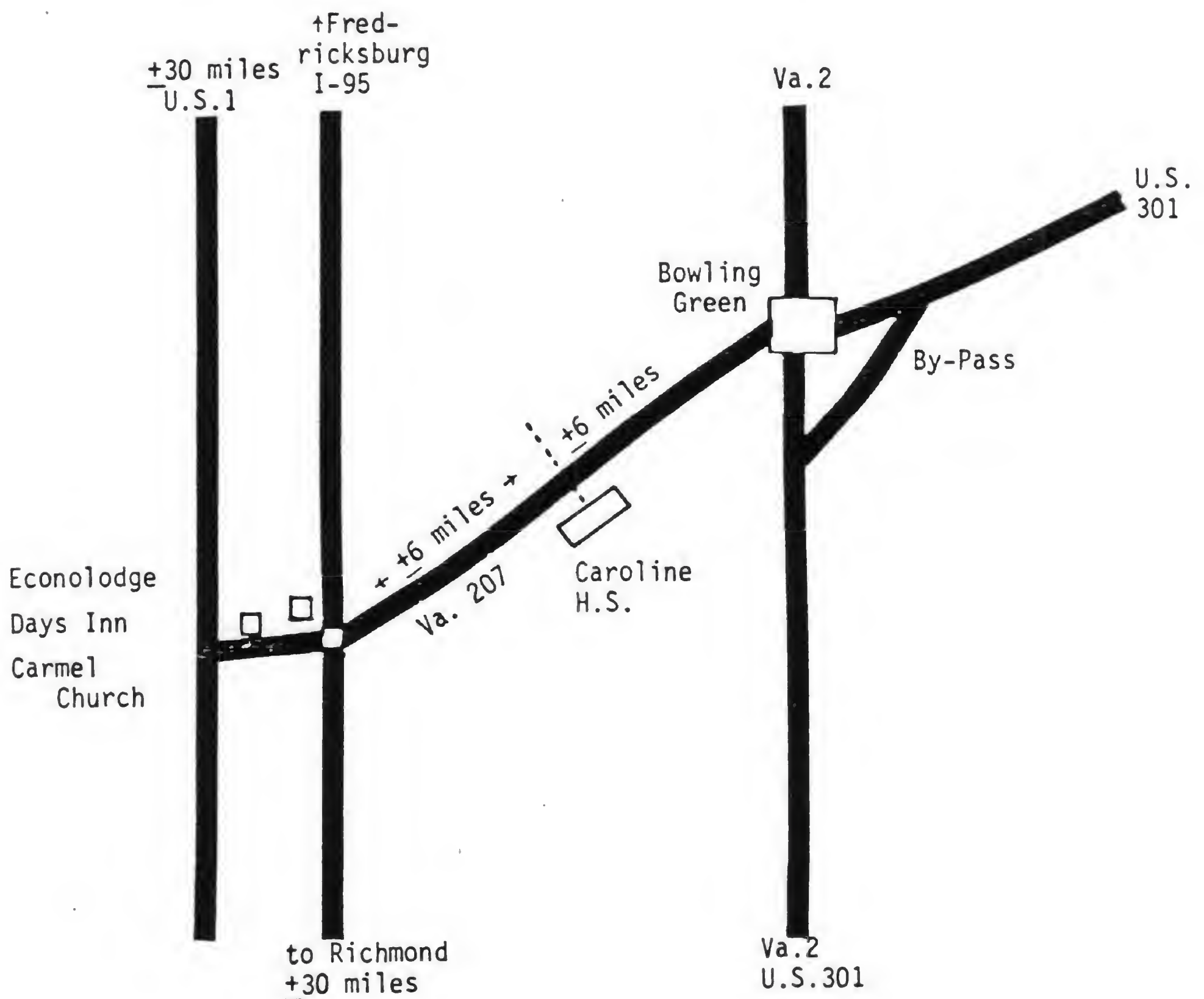
10

VHS Spring Meeting
April 12, 1986

Caroline High School, Bowling Green, Virginia
Mrs. Dale L. Brittle, in charge local arrangements
Meeting in seminar room (follow signs), 10-12:30

Local motels on Rts. I-95 and Va. Hy. 207, ea. 6-7
miles west of the school (see map). Rates
\$26-30 single to \$30-35 dbl., may be higher in April

Econolodge (804)-448-2828
Days Inn (804)-448-2011



Membership Application

I wish to ☐ initiate ☐ renew membership in the Virginia Herpetological Society for the year 19____.

☐ I wish only to receive a membership list. Enclosed is \$1.00 to cover cost.

Name _____

Address _____

Phone _____

Dues category: ☐ Regular (5.00) ☐ Family (7.50) ☐ Under 18 (3.00)

Interests: ☐ Reptiles ☐ Amphibians ☐ Captive husbandry

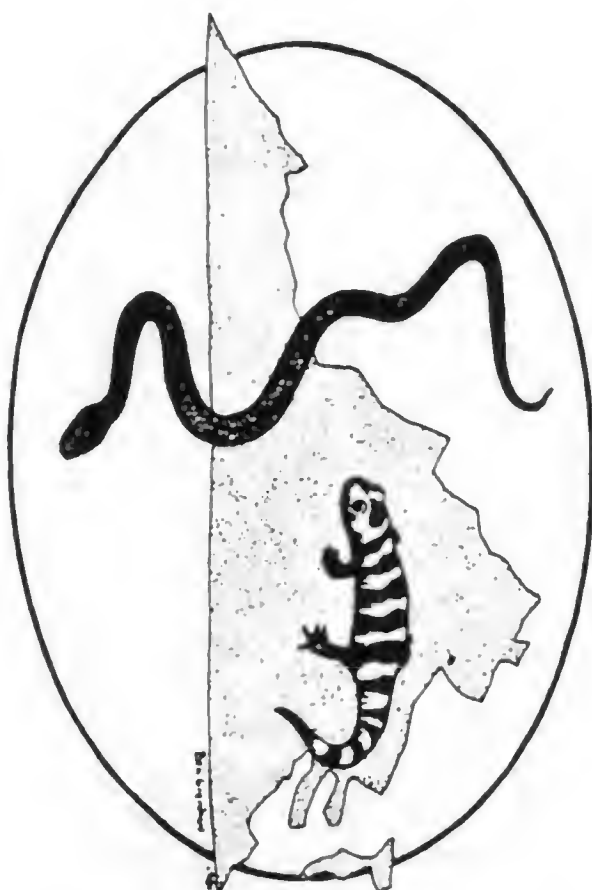
☐ Distribution ☐ Research ☐ Specifically: _____

Make checks payable to the Virginia Herpetological Society and send to the treasurer.



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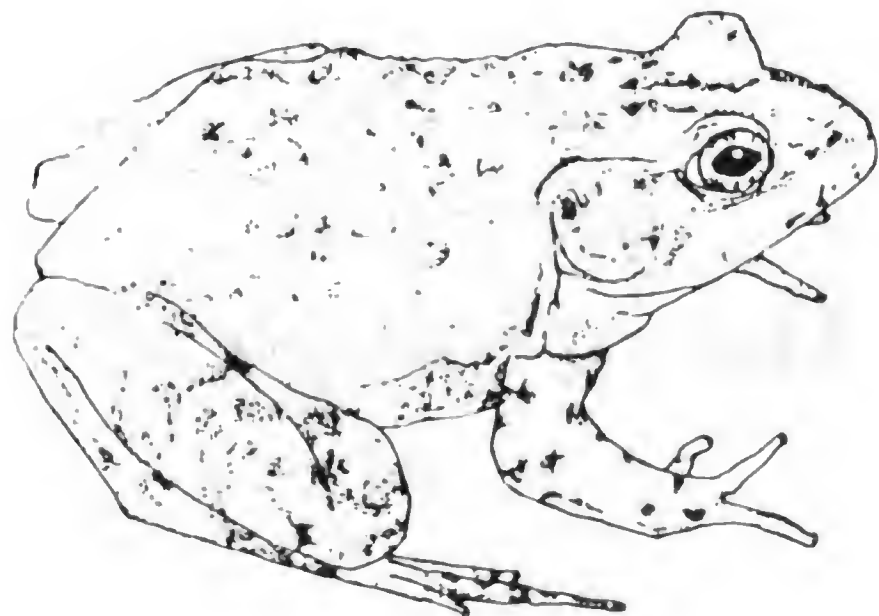


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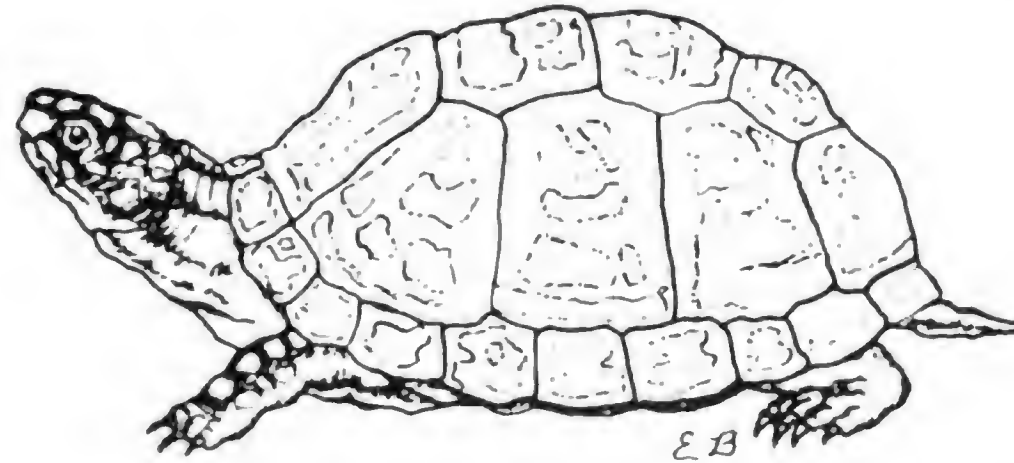
*A society open to everyone
with an interest in the
conservation, study and care
of reptiles and amphibians*

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Meetings are held twice each year, in Spring and Fall, at different locations throughout the state. The program is open to all members and includes a business meeting and a contributed papers session, during which members present information on their work with reptiles and amphibians, particularly in Virginia. An afternoon field trip usually follows.



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Society dues are \$5.00 per year (\$3.00 for members under 18, and \$7.50 for families).

Inquiries should be addressed to the secretary.

Membership can be initiated at meetings. Dues may be paid at that time.

President: Dr Richard L. Hoffman, Dept. of Biology, Radford University, Radford, VA 24142

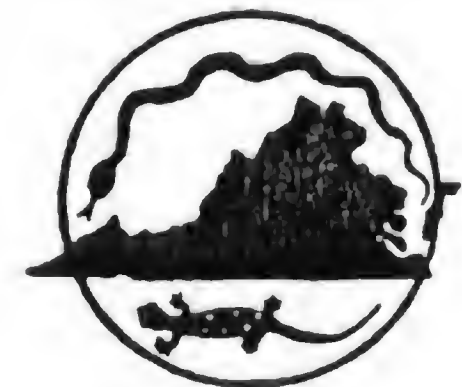
Vice President: Christopher A. Pague, Dept. of Biological Sciences, Old Dominion University, Norfolk, VA 23508

Secretary/Treasurer: Laura Crews, 412 Dunmore Dr., Newport News, VA 23602 (804) 874-8943

Coeditors: Dr. Eugene Gourley and Dr. Charles Neal, Radford University, Radford, VA 24142

Advantages of VaHS membership

- Spring meeting with talks, slides, and field trip
- Fall meeting with lectures, film or workshop
- Society bulletin published twice per year
- Extensive research material available
- Awareness of current herpetological events
- Opportunity to meet others who share your interest in herps
- Support of VaHS education and conservation goals



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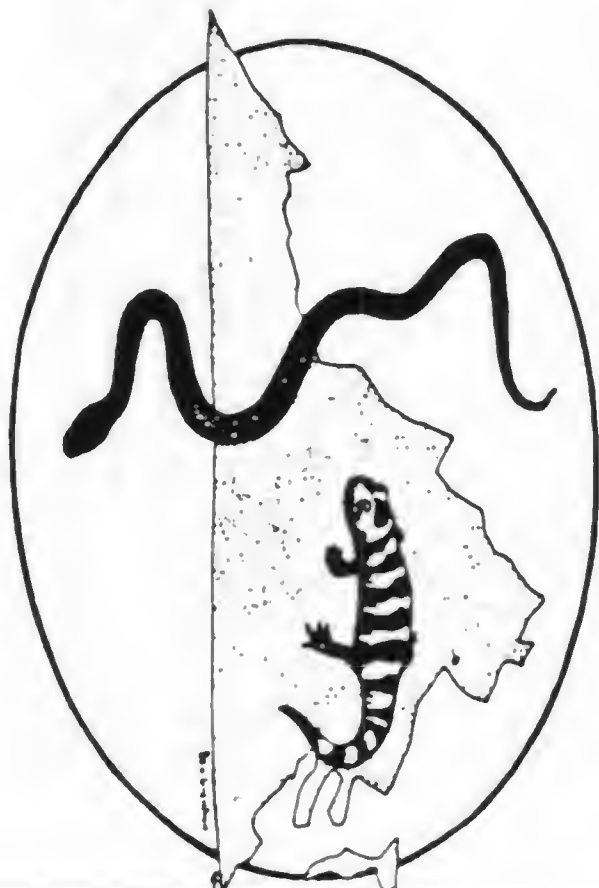
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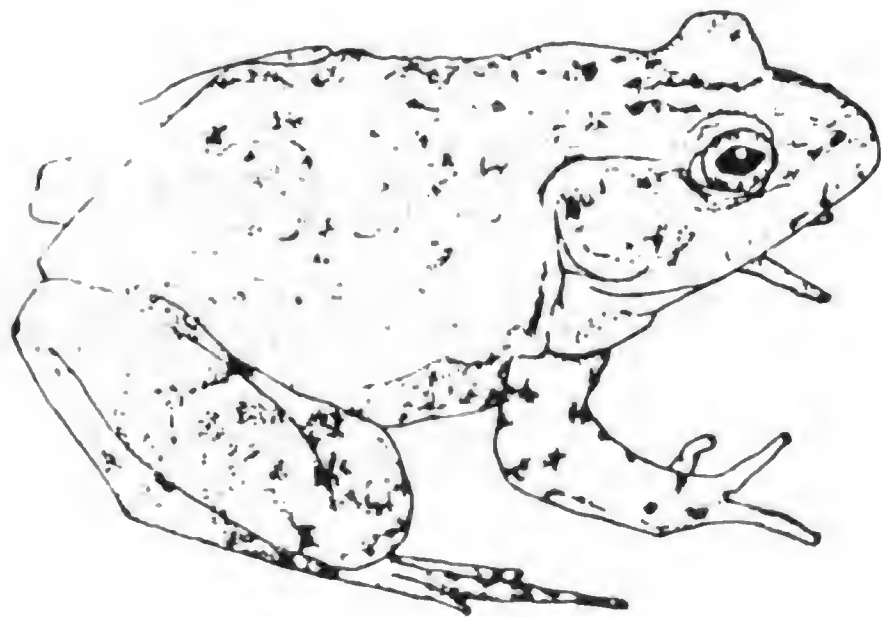


The Virginia Herpetological Society

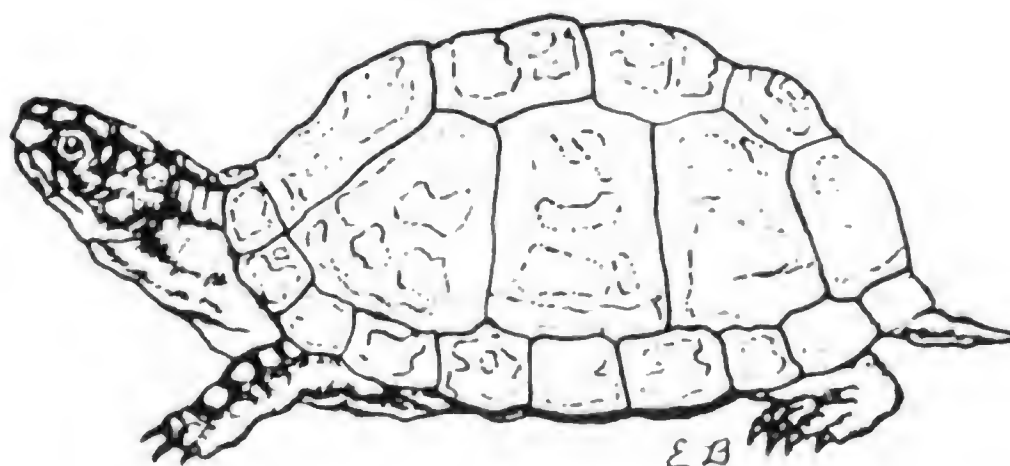
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